# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/571,995 | 03/15/2006 | Johannes Antonius Craamer | 07054.0006.PCUS00 | 5581 |

32894      7590      01/18/2008
HOWREY LLP
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DR., SUITE 200
FALLS CHURCH, VA 22042

| EXAMINER |
|---|
| NGUYEN, KHANH TUAN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1796 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 01/18/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *30 November 2007*.

2a)☒ This action is **FINAL**.    2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-3, 5-15, 18-23, 25 and 26* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-15, 18-23, 25 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some *   c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

### *Final*

### *Response to Amendment*

1.      The amendment filed on 11/23/2007 is entered and acknowledged by the

Examiner.  Claims 1-3, 5-15, 18-23, and 25-26 are currently pending in the instant

application.  Claims 4, 16, 17, and 24 have been canceled.

2.      The objected to the specification due to minor informality is withdrawn light of

Applicant's amendment.  The objection of claims 1 and 23 due to minor informality is

withdrawn light of Applicant's amendment.  The rejection of claims 1 and 23 under 35

U.S.C. 112, first paragraph, as failing to comply with the written description requirement

is withdrawn in light of applicant's amendment and remarks.  The rejection of claims 1-3,

5-15, 18-23, and 25-26 under 35 U.S.C. 103(a) as being unpatentable over Miller et al.

(U.S. Pat. 6,120,560) or Dawson et al. (G.B Pat. 2,187,419) in view of Teumer (U.S Pat.

4,347,521) is withdrawn in light of Applicant's amendments and remarks.

### *Information Disclosure Statement*

3.      The information disclosure statement (IDS) submitted on 11/30/2007 has been

initialed by the Examiner.

## Claim Rejections - 35 USC § 103

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.      Claims 1-3, 5, 7-15, 18-23, and 25-26 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Miller et al. (U.S Pat. 6,120,560) or Dawson et al. (G.B Pat.

2,187,419) either in view of English Translated of Ishihara et al. (JP Pub. 06-220781) or

in view of English Translation of Masuda et al. (JP Pub. 60-157867).

        With respect to instant claims 1-3, 5, 7-15, 18-23, and 25-26, Miller discloses

(please refer to fig.1, fig. 2 and fig. 3) a method for upgrading a textile article (5) such as

clothing, using an upgrading device such as a solid shade dyer (12) and a dyeing jet

patterning device (20) to apply droplets of dye to the clothing article.  The said

patterning device comprising a series of nozzles or applicator arrays (54) that can be

actuated by computer (digitally controlled).  A conveyor or roller (34, 38, 52) transport

the textile articles to the array of nozzles (54), wherein the first nozzles (not label) coat

the textile article with a dyeing ink and subsequently guild the said article to the second

nozzle (not label) to be coated with a second dye color or pattern.  The method

comprising the steps of a) affixing a first textile article (5) to the conveyor (34, 38, 52) to

substantially prevent relative movement there between; b) guiding the first textile article

past a first row (12) of nozzles; c) performing with the first row (12) of nozzles one of the

operations of painting, coating or finishing of the textile article carried there past; d)

subsequently guiding the first textile past a second row (54) of nozzles; e) performing

with the second row (54) of nozzles another of the operations of painting, coating or

finishing of the textile article carried there past (Col. 3, lines 30-65 and Col. 4, lines 5-

50).

Similarly, Dawson discloses (please refer to fig.1 to fig. 4) a method for

upgrading a textile article (14) such as clothing, using an upgrading device such as a

patterning device (B, C, D), a setting station (F) and a computer 30 to digitally control

the pattern or design. The said patterning device comprises of plurality of nozzles or

capillary jets (17) for applying one or more substances to the textile articles (14), in

addition to a conveyor belt (12) for transporting the textile articles past the nozzles (17),

wherein the nozzles (17) are ordered in a number of successively placed rows

extending transversely of the transporting direction of the textile article, the method

comprising the steps of a) affixing a first textile article (14) to the conveyor (12) onto a

feed station (A) to substantially prevent relative movement there between; b) guiding the

first textile article past a first row (15 B) of nozzles; c) performing with the first row (15 B)

of nozzles one of the operations of painting, coating or finishing of the textile article

carried there past; d) subsequently guiding the first textile past a second row (15 C) of

nozzles; e) performing with the second row (15 C) of nozzles another of the operations

of painting, coating or finishing of the textile article carried there past. After coated with

a plurality of design or pattern, the substrate is take-off at station E (Col. 2, lines 75-

120). Dawson further discloses the printing line comprising a computer (30) for

controlling the pattern devices (B, C, D) for printing or coating a pre-programmable

pattern or design (Col. 3, lines 95-108) onto a substrate.

The difference between Miller and Dawson references and the instant application

is that both Miller and Dawson failed to suggest a step of affixing the textile article to the

conveyor.

In an analogous art, Ishihara teaches affixing fabric 1 (textile article) to a

conveyor belt 3 using a double-sided adhesive sheet 4 to easily obtain a high-quality

printed product during the circulatory movement of the endless conveyor belt at high

operating efficiency (Abstract).

Masuda teaches a method of affixing the cloth 2 to the conveyor belt 3 using a

cloth-suction housing 4 wherein the cloth is affix on the conveyor by suction and move

along to the array of nozzles 1 to be coated by ink jet system without causing staggering

or distortion even when the cloth is flexible and with little blurring of droplets and large

penetration depth (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the method and apparatus for upgrading textile

as taught by Miller or Dawson by affixing the textile article (i.e. fabric and cloth) to the

conveyor by double-sided adhesive sheet as suggested by Ishihara or applying suction

to affix the cloth to the conveyor as suggested by Masuda in order to provide high-

quality printed product at high operating efficiency and/or prevent staggering or

distortion to the cloth during coating process.


6.      Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et

al. (U.S Pat. 6,120,560) or Dawson et al. (G.B Pat. 2,187,419) either in view of English

Translated of Ishihara et al. (JP Pub. 06-220781) or in view of English Translation of

Masuda et al. (JP Pub. 60-157867) as applied to the above claims, and further in view

of Teumer (U.S Pat. 4,347,521).


        Miller, Dawson, Ishihara, and Masuda are relied set forth above.  Miller, Dawson,

Ishihara, and Masuda failed to suggest a method that generates at least 100,000

droplets per second.

        In the same field of endeavor, Teumer discloses a coating method by drop

printing system that contains an array of nozzles 18 capable of generating at least from

about 100,000 drops per second (dps) to over 200,000 dps (col. 4, lines 57-60).

        Therefore, it would have been obvious to one of ordinary skill in the art to modify

the method and apparatus for upgrading textile articles, as taught by Miller or Dawson in

view of either Ishihara or Masuda, by incorporating an array of nozzles capable of

producing at least 100,000 dps, as taught by Teumer, in order to improve the method

and apparatus for compensating for distortion in a scan or print line of drops due relative

motion of the drop generator and target in a printing system having multiple nozzles

(Col. 1, lines 53-58).

## Response to Arguments

7.      Applicant's arguments with respect to claims 1-3, 5-15, 18-23, and 25-26 have been considered but are moot in view of the new ground(s) of rejection set forth above.

## Conclusion

8.      Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571)
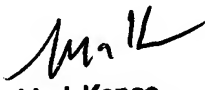
272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KTN
01/14/2008

Mark Kopec
Primary Examiner